



The Hebrew University of Jerusalem

Syllabus

RUMINANT NUTRITION - 65712

Last update 13-05-2024

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Veterinary Medicine

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Rehovot

Course/Module Coordinator: Sameer Mabjeesh

Coordinator Email: sameer.mabjeesh@mail.huji.ac.il

Coordinator Office Hours: By appointment

Teaching Staff:

Prof Sameer Mabjeesh

Course/Module description:

The course begins with an introduction to the anatomy and physiology of the ruminant together with Basic metabolic pathways. The second part of the course is devoted to digestion and absorption process of major feed nutrients in the gastro intestinal tract with emphasis on feed induced metabolic disorders. Common feed characteristics are described with emphasis on processing, preservation, and related feeding drawbacks.

Course/Module aims:

- 1.Introduction and ruminants GI tract
- 2.Carbohydrate
- 3.fats, vitamins and minerals
- 4.proteins and rumen fermentation
- 5.Ruminant feeds
- 6.bunk management and TMR
- 7.energy and heifers nutrition
- 8.The fresh cow
- 9.Small ruminants nutrition
10. Pigs nutrition

Learning outcomes - On successful completion of this module, students should be able to:

Acquainted with the unique aspects of ruminant nutrition, specifically of the Israeli dairy cow raised under intensive conditions.
Take the advance course in clinical nutrition of ruminants

Attendance requirements(%):

100

Teaching arrangement and method of instruction: Lectures and educational trip

Course/Module Content:

- 1.Introduction and Ruminant gastrointestinal anatomy and physiology.ruminants GI tract .
- 2.carbohydrate

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3. Fats, vitamins and minerals
 4. Fermentation and digestion in the ruminant
 5. Ruminant feeds – characteristics and application.
 6. Ruminant feeding levels for maintenance, growth and production purposes.
 7. Nutrition husbandry.
 8. Applied nutrition and clinical manifestations.
 9. small ruminant nutrition
 10. porcine nutrition

Required Reading:

Appears in presentations

Additional Reading Material:

Appears in presentations

Grading Scheme:

Written / Oral / Practical Exam 100 %

Additional information:

None